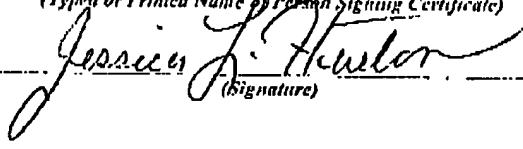


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|--|---------------------------|---------------------------|--------------------------|
| CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8) | | | Docket No. JEN-0005-2 |
| Applicant(s): C. PANZERA ET AL. | | | |
| Application No. 09/160,951 | Filing Date 12/14/1999 | Examiner J. M. Hoffman | Group Art Unit 1731 |
| Invention: METHOD OF MANUFACTURE OF DENTAL PORCELAIN HAVING SMALL LEUCITE CRYSTALLITES | | | |
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| APPLICANT: | CARLINO PANZERA ET AL |) | |
| | |) | Group Art Unit: 1731 |
| SERIAL NUMBER: | 09/460,951 |) | |
| | |) | Before the Examiner: |
| FILED: | December 14, 1999 |) | Derrington, J. |
| | |) | |
| FOR: | METHOD OF MANUFACTURE |) | |
| | OF DENTAL PORCELAIN |) | |
| | HAVING SMALL LEUCITE |) | |
| | CRYSTALLITES |) | |

REPLY BRIEF

Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

These remarks are submitted in reply to the Examiner's Answer, mailed on November 29, 2005. The Examiner has withdrawn U.S. Patent No. 5,698,019 to Frank as a primary reference and has dropped the rejection of claim 5.¹ Claims 1-4 and 6-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over or German Patent 1441336 in view of Chemical Abstracts 120 (M.Y. Shareef et al). Respectfully, the Examiner fails to demonstrate that it would have been obvious to DE 1441336 in view of Shariff renders obvious a dental restoration having leucite crystallites not exceeding about 10 microns in diameter.

The Examiner maintains that DE 1441336 teaches how to eliminate all particles larger than 74 microns and that "this is deemed sufficient to show that one can eliminate all particles of any chosen size." [Answer, p. 8]. Appellant respectfully objects to this statement as conclusory and entirely without support. Obviously, a 74 micron particle is many times larger than a 10 micron particle and it is simply too speculative to conclude that the removal of particles larger than 74 microns would suggest the removal of leucite crystals larger than 10 microns in diameter.

Further, Shareef makes no mention of any specific crystal size but merely teaches "... using smaller size starting powders for making leucite-containing dental products" [Answer, p. 6]. Again, it is mere speculation to conclude that the "smaller size starting powders" of Shareef suggests that the leucite should be devoid of any crystals larger than 10 microns in diameter. Moreover, the purpose for the crystal sizes in Shareef and in the present

¹ Claim 5 is now objected to as being dependent on a rejected base claim, i.e., claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim. [Answer, p. 2]. Because claim 1 is allowable for the reasons described herein and in Appellant's Appeal Brief, claim 5 is allowable in its present form.

Application are completely different. As discussed in the Answer, Shareef teaches that the small crystal size is desirable because it results "in less microcracking and 'significantly higher biaxial flexural strength – from around 60 MPa to around 120 MPa.'" [Answer, p. 6]. Based on this, the Examiner states that "[O]ne would have been motivated to use as fine of sized particles as would maximize the strength of the final product." [Id]. However, while the benefits described in Shareef require "smaller size" particles, there is indication that there must be no crystals larger than 10 microns in diameter in order to achieve those benefits. Thus, Shareef does not provide any motivation to eliminate all crystals larger than 10 microns because there is no indication.

In contrast, the purpose of the leucite crystals not exceeding 10 micron in the present Application is to eliminate a rough and uneven surface in the restoration:

Diameters in excess of about 10 microns will impart an undesirably rough and uneven surface to the composition when employed in its intended environment of use. Indeed, it has been determined that leucite diameters above about 10 microns may wear away local dentition and cause discomfort/irritation inside the oral cavity.

[Application, p. 5, ll. 1-4]. Thus, because the motivation for the respective crystal sizes taught in the present Application is completely different from the motivation taught in DE 1441336 in view of Shareef, there is no indication that DE 1441336 in view of Shareef would suggest the use of leucite crystals not exceeding 10 micron to one of skill in the art.

In view of the foregoing, Appellant requests that the rejection of claims 1-4, 6-7 under 35 U.S.C. § 103(a) be reversed.

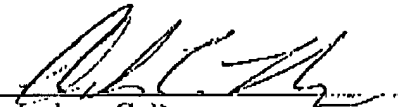
If there are any additional charges with respect to this Appeal Brief or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Appellant's Attorneys.

Respectfully submitted,

Carlino Panzera et al.

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